#### GENERAL DESCRIPTION

 THE DEPARTMENT OF ENVIRONMENTAL PROTECTION (DEP) OF THE COMMONWEALTH OF PENNSYLVANIA REQUIRES THE PREPARATION AND IMPLEMENTATION OF A PLAN FOR THE PREVENTION OF ACCELERATED SOIL EROSION AND SEDIMENTATION OF THE STREAMS OF THE COMMONWEALTH UNDER TITLE 25, CHAPTER 102 OF THEIR REGULATIONS. SUCH PLANS ARE REQUIRED FOR ALL EARTHMOVING ACTIVITIES AND IT IS INTENDED THAT THIS PLAN WILL FULFILL THIS DEP

2. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO IMPLEMENT THIS PLAN IN THE FIELD AND MEET ALL STATE AND LOCAL REGULATIONS. THE CONTRACTOR SHALL ASSIGN THIS RESPONSIBILITY TO A PERSON EXPERIENCED IN SEDIMENT AND EROSION CONTROL PROCEDURES. MODIFICATIONS OR DEVIATIONS FROM THIS PLAN WILL BE ALLOWED ONLY IF THE CONTRACTOR FIRST OBTAINS WRITTEN APPROVAL FROM DEP.

# APPLICABLE STANDARDS

SOIL EROSION AND SEDIMENTATION CONTROL MANUAL: 1. PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL

REQUIREMENT AND PREVENT SEDIMENTATION.

#### <u>STANDARD CONDITIONS RELATING TO DEP WATER QUA</u>LITY MANAGEMENT PERMITS

THE CONTRACTOR SHALL FAMILIARIZE HIMSELF AND SHALL BE RESPONSIBLE FOR CARRYING OUT ALL REQUIREMENTS STATED IN THE STANDARD CONDITIONS RELATING TO EROSION CONTROL WHICH ARE ATTACHED TO THE DEP WATER MANAGEMENT PERMIT ISSUED THE OWNER FOR THE CONSTRUCTION OF THIS PROJECT.

PROTECTION.

ALL PRODUCTS AND MATERIALS SHALL MEET THE REQUIREMENTS OF THE LOCAL CONSERVATION DISTRICT OR AS SPECIFIED ELSEWHERE IN THESE SPECIFICATIONS.

#### PROJECT DESCRIPTION

1. THE PROJECT IS LOCATED ON THE VA LEBANON CAMPUS OFF STATE DRIVE. THE PROJECT WILL INVOLVE REMOVAL OF THE EXISTING WATER TANK AND PLACEMENT OF A NEW WATER

2. THIS PROJECT INCLUDES AN EROSION AND SEDIMENT POLLUTION CONTROL PLAN.

THE PROPOSED EROSION AND SEDIMENT POLLUTION CONTROL PLAN HAS BEEN DESIGNED TO PREVENT THE LOSS OF SOIL COVER DURING THE SITE CONSTRUCTION AND DEVELOPMENT PHASE OF THIS PROJECT. THE PLAN INCLUDES A SEQUENCE OF CONSTRUCTION ACTIVITIES, TEMPORARY AND PERMANENT EROSION CONTROL MEASURES, AND A MAINTENANCE PLAN TO INSURE THE PROPER OPERATION OF THE TEMPORARY AND PERMANENT CONTROLS PROPOSED FOR THIS PROJECT.

4. CONSTRUCTION OF THIS PROJECT IS SCHEDULED TO BEGIN IN MARCH, 2012 WITH COMPLETION PLANNED FOR SEPTEMBER. 2012. THE SEQUENCING OF CONSTRUCTION ACTIVITIES PROVIDES THAT AS AREAS ARE BROUGHT TO PROPOSED GRADE, FINAL SOIL STABILIZATION MEASURES WILL BE INITIATED. THROUGHOUT THE DURATION OF THE PROJECT, CONSTRUCTION AREAS LEFT EXPOSED WILL BE SEEDED AND MULCHED IMMEDIATELY.

5. RECEIVING WATERSHED IS A TRIBUTARY TO SNITZ CREEK; CHAPTER 93 RECEIVING WATER CLASSIFICATION IS "CWF" COLD WATER FISH.

6. ANY AND ALL WASTE FROM THIS PROJECT WILL BE DISPOSED OF PER D.E.P. SOLID WASTE REGULATIONS.

# TOPOGRAPHIC FEATURES OF THE AREA

THE EROSION AND SEDIMENT POLLUTION CONTROL PLAN DESCRIBES THE PROJECT AREA. CONTOURS AT 2 FOOT INTERVALS ARE SHOWN ON THE PLAN AS WELL AS PROPERTY BOUNDARY LINES AND OTHER PHYSICAL FEATURES. SOIL TYPES ARE ALSO INDICATED IN THIS REPORT.

# DESIGN CRITERIA

THE METHOD USED IN DESIGNING SEDIMENT CONTROL MEASURE WAS TAKEN FROM EROSION AND SEDIMENT POLLUTION CONTROL PROGRAM MANUAL DATED 2000.

# STAGE OF CONSTRUCTION ACTIVITIES

1. PLACE SILT FENCE AS SHOWN ON PLAN.

2. PREFORM ROUGH GRADING TO EXTEND EXISTING ACCESS ROAD. REMOVE EXISTING TREES THAT ARE WITHIN LIMITS OF WORK. STUMPS CAN REMAIN FOR TREES OUTSIDE OF ROADWAY AND TANK AREA.

3. ALSO REMOVE THE TREES NECESSARY TO PLACE NEW WATER

4. EXCAVATE AREA FOR NEW TANK FOUNDATION, INSTALL WATER MAIN FROM EXISTING VALVE TO NEW TANK.

5. INSTALL TEMPORARY DRIVE TO ALLOW FOR DELIVERY OF MATERIALS.

6. CONSTRUCT NEW TANK. REMOVE EXISTING TANK.

7. PLACE PAVEMENT STRUCTURE ON NEW ACCESS ROAD.

8. REMOVE TEMPORARY DRIVE.

9 16

9. PLANT THE REQUIRED NUMBER OF NEW TREES.

10. SEED AND MULCH ANY AREA'S DISTRUBED DURING CONSTRUCTION NOT ALREADY STABILIZED. PLACE LANDSCAPING. ONCE SITE HAS REACHED 70% UNIFORM VEGETATION REMOVE ALL TEMPORARY CONTROL MEASURES, INCLUDING ROCK FILTER, ROCK FILTER DAM AND SILT FENCE.

11. RECEIVING WATERSHED IS A TRIBUTARY TO SNITZ CREEK: CHAPER 93 RECEIVING WATER CLASSIFICATION IS "CWF" COLD WATER FISH.

12. ANY AND ALL WASTE FROM THIS PROJECT WILL BE DISPOSED OF PER SOLID WASTE REGULATIONS.

13. UPON COMPLETION OF AN EARTH DISTURBANCE ACTIVITY OF ANY STAGE OR PHASE OF ANY ACTIVITY, THE SITE SHALL BE IMMEDIATELY SEEDED, MULCHED, OR OTHERWISE PROTECTED FROM ACCELERATED EROSION AND SEDIMENTATION.

14. CONTRACTOR/DEVELOPER IS TO MAKE HIM/HERSELF AWARE OF CHAPTER 102.22(a) REQUIREMENTS.

#### TEMPORARY CONTROL MEASURES

1. ALL TEMPORARY MEASURES IN THIS PLAN ARE TO BE USED TO MINIMIZE EROSION OF THE CONSTRUCTION AREAS AND TO REDUCE SILTATION DOWNSTREAM FROM THE WORK AREAS.

2. AREAS DISTURBED BY CONSTRUCTION WHICH CANNOT BE BROUGHT TO FINAL GRADE WILL BE IMMEDIATELY STABILIZED USING A TEMPORARY COVER.

3. THIS TEMPORARY COVER IS TO BE AN ANNUAL RYE GRASS SEEDED AT THE RATE OF 50 POUNDS PER ACRE AND MULCHED WITH HAY OR STRAW AT THE RATE OF 3 TONS PER ACRE.

# MAINTENANCE PROGRAM

1. MAINTENANCE OF BOTH THE TEMPORARY AND PERMANENT EROSION CONTROL MEASURES IS NECESSARY TO MAINTAIN THEIR EFFECTIVENESS. THE FILTER FABRIC IS TO BE CHECKED AFTER EACH RUNOFF FOR STRUCTURAL PROBLEMS AND SILTATION. BARRIERS SHOULD BE CLEARED WHEN THE DEPTH OF SEDIMENT REACHES ONE-THIRD THE HEIGHT OF THE

2. AREAS WHERE PERMANENT VEGETATION HAS BEEN INSTALLED MUST BE CHECKED MONTHLY THROUGH THE GROWING SEASON TO INSURE THAT AN ADEQUATE STAND IS DEVELOPING. MAINTENANCE COULD INCLUDE RESEEDING, REMULCHING, AND MATTING OF POORLY DEVELOPED SECTION.

3. ALL AREAS THAT REQUIRE STONE PROTECTION TO REDUCE EROSION SHOULD BE CHECKED AFTER EACH RUNOFF. AREAS WHERE STONE HAS BEEN DISPLACED OF DISLODGED FROM ITS ORIGINAL POSITION SHOULD BE REPLACED WITHIN A WEEK BETWEEN THE TIME OF THE EVENT AND THE TIME OF RESTORATION.

4. ANY AREAS TO BE SEEDED, THAT CANNOT BE SEEDED BY NOVEMBER 15TH WILL BE MULCHED WITH HAY OR STRAW AT THE RATE OF 3.0 TONS PER ACRE AND ALL INTERIM EROSION AND SEDIMENT POLLUTION CONTROLS SHALL BE MAINTAINED UNTIL THE FOLLOWING SUITABLE SEEDING SEASON. ALL AREAS MUST HAVE ALL CONTROLS MAINTAINED UNTIL THE SITE IS PERMANENTLY STABILIZED.

#### STABILIZED ROCK ENTRANCE ROAD PAD

1. CONSTRUCT STABILIZED CONSTRUCTION PADS AT THE LOCATIONS SHOWN ON THE PLANS, AND/OR DESIGNATED IN THE SEQUENCE OF CONSTRUCTION ACTIVITIES.

2. EXCAVATE THE AREA SHOWN ON THE PLANS TO A DEPTH OF 6" AT THE ENTRANCE POINT TO THE CONSTRUCTION AREA. REMOVE EXCAVATED MATERIAL AND TRANSPORT TO A PREPARED SUBGRADE.

3. PLACE A BARRIER MAT OF CLASS 4 GEOTEXTILE ON THE PREPARED SUBGRADE.

4. PROVIDE A SIX INCH DEPTH OF 3 INCH DIAMETER ROCK.

5. PERIODICALLY INSPECT THE ROCK TO DETERMINE WHETHER CLOGGING OF MATERIAL HAS REDUCED THE EFFICIENCY OF THE STABILIZED CONSTRUCTION ENTRANCE PAD.

6. REPLACE ROCK MATERIAL WHEN MATERIAL DOES NOT ADEQUATELY REMOVE MUD FROM VEHICLE WHEELS. ALSO REMOVE SEDIMENT FROM LOCAL ROADWAY AS IT BECOMES

INSTALLATION OF CLASS 4 GEOTEXTILE MATERIAL (S.Y.) (AS PER PG. 212, PENNSYLVANIA DEPARTMENT OF TRANSPORTATION STANDARD 408 AND APPLICABLE ROADWAY CONSTRUCTION

#### **TEMPORARY SEEDING**

1. ALL AREAS TO BE PREPARED AND SEEDED ACCORDING TO THE FOLLOWING RATES. ANY AREA RECEIVING TEMPORARY SEEDING WHICH WILL BE LEFT FOR A PERIOD LONGER THAN ONE YEAR SHALL BE SEEDED WITH THE PERMANENT SEEDING

A. FERTILIZER: FERTILIZE AT THE FOLLOWING RATES: 50 LB. OF N PER ACRE 50 LB. OF P205 PER ACRE 50 LB. OF K20 PER ACRE

B. LIME: AGRICULTURAL GRADE LIME AT RATE OF 1 TON PER

C. SEED: SEED WEIGHTS GIVEN BELOW ARE PLS (PURE LIVE

1. FOR SPRING SEEDING (UP TO JUNE 15) ANNUAL RYEGRASS 40 #/ACRE OR WINTER RYE 168 #/ACRE OR SPRING OATS PLUS ANNUAL RYEGRASS 64 #/ACRE OATS

20 #/ACRE RYEGRASS 2. FOR LATE SPRING AND SUMMER SEEDING (JUNE 16 TO AUGUST 15)

SUDANGRASS 40 #/ACRE OR ANNUAL RYEGRASS 40 #/AREA 3. FOR LATE SUMMER AND FALL (BEYOND AUGUST 15)

ANNUAL RYEGRASS 40 #/ACRE OR WINTER RYE 168 #/ACRE OR WINTER WHEAT 180 #/ACRE

D. MULCH: STRAW OR HAY AT RATE OF 3 TONS PER ACRE.

# PERMANENT SEEDING

1. ALL AREAS TO BE SEEDED ACCORDING TO THE FOLLOWING RATES. MULCH IS TO BE USED AS NECESSARY FOR EROSION PROTECTION UNTIL SEEDING IS ESTABLISHED.

A. TOPSOIL: FREE OF SUBSOIL, CLAY OR IMPURITIES, PLANTS, WEEDS AND ROOTS: pH VALUE MINIMUM 5.4 AND MAXIMUM 7.0. B. FERTILIZER: TYPE 1. GRADE A AS REQUIRED TO ELIMINATE ANY DEFICIENCIES OF TOPSOIL AS INDICATED BY SOIL

ANALYSIS. MINIMUM FERTILIZER APPLICATION RATE: 100 LB. OF N PER ACRE 200 LB. OF P205 PER ACRE

200 LB. OF K20 PER ACRE

REDTOP: 3 LB PER ACRE

C. PERMANENT SEED: SEED WEIGHTS GIVEN BELOW ARE PLS (PURE LIVE SEED)

MOWABLE AREA: KENTUCKY BLUE GRASS: 25 LB PER ACRE RED TOP: 3 LB PER ACRE NORLEA PERENNIAL RYE: 15 LB PER ACRE

BIRDSFOOT TREFOIL: 6 LBS PER ACER EMBANKMENT AREAS (DIVERSIONS AND SLOPES GREATER THAN BÍRDSFOOT TREFOIL: 6 LB PER ACRE REED CANARYGRASS: 10 LB PER ACRE

D. MULCH: OAT OR WHEAT STRAW, FREE FROM WEEDS, FOREIGN MATTER DETRIMENTAL TO PLANT LIFE AT A RATE OF 3 TONS

E. LIME: AGRICULTURAL GRADE LIME AT A RATE CALCULATED FROM THE SOILS TEST TO BRING THE SOIL pH WITHIN 5.5 TO 6.0 APPLY AGRICULTURAL GRADE LIME AT A RATE OF 6 TONS PER ACRE IN THE ABSENCE OF A SOILS TEST.

102.2(A) "THIS CHAPTER REQUIRES PERSONS PROPOSING OR CONDUCTING EARTH DISTURBANCE ACTIVITIES TO DEVELOP, IMPLEMENT AND MAINTAIN BMP'S TO MINIMIZE THE POTENTIAL

STANDARD EROSION AND SEDIMENT CONTROL PLAN NOTES

FOR ACCELERATED EROSION AND SEDIMENTATION." 102.4(B)(3) "THE EROSION AND SEDIMENT CONTROL PLAN SHALL BE PREPARED BY A PERSON TRAINED AND EXPERIENCED IN EROSION AND SEDIMENT CONTROL METHODS AND

TECHNIQUES, AND SHALL BE DESIGNED TO MINIMIZE THE POTENTIAL FOR ACCELERATED EROSION AND SEDIMENTATION." 1. VEHICLES AND EQUIPMENT MAY ONLY ENTER THE PROJECT

SITE AT THE ROCK CONSTRUCTION ENTRANCE LOCATION. 2. THE OPERATOR SHALL ASSURE THAT THE APPROVED EROSION AND SEDIMENT CONTROL PLAN IS PROPERLY AND

COMPLETELY IMPLEMENTED.

3. UNTIL THE SITE ACHIEVES FINAL STABILIZATION, THE OPERATOR SHALL ASSURE THAT THE BEST MANAGEMENT PRACTICES ARE IMPLEMENTED, OPERATED, AND MAINTAINED PROPERLY AND COMPLETELY. MAINTENANCE SHALL INCLUDE INSPECTIONS OF ALL BEST MANAGEMENT PRACTICE FACILITIES AND MAINTAIN AND MAKE AVAILABLE TO LACKAWANNA COUNTY CONSERVATION DISTRICT COMPLETE, WRITTEN INSPECTION LOGS OF ALL THOSE INSPECTIONS. ALL MAINTENANCE WORK, INCLUDING CLEANING, REPAIR, REPLACEMENT, REGARDING, AND

4. IMMEDIATELY UPON DISCOVERING UNFORESEEN CIRCUMSTANCES POSING THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION, THE OPERATOR SHALL IMPLEMENT APPROPRIATE BEST MANAGEMENT PRACTICES TO ELIMINATE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION.

RESTABILIZATION SHALL BE PERFORMED IMMEDIATELY.

5. BEFORE INITIATING ANY REVISIONS TO THE APPROVED EROSION AND SEDIMENT CONTROL PLAN OR REVISIONS TO OTHER PLANS WHICH MAY AFFECT THE EFFECTIVENESS OF THE APPROVED E&S CONTROL PLAN, THE OPERATOR MUST RECEIVE APPROVAL OF THE REVISIONS FROM THE LACKAWANNA CONSERVATION DISTRICT.

6. THE OPERATOR SHALL ASSURE THAT AN EROSION AND SEDIMENT CONTROL PAN HAS BEEN PREPARED. APPROVED BY THE LACKAWANNA CONSERVATION DISTRICT, AND IS BEING IMPLEMENTED AND MAINTAINED FOR ALL SOIL AND/OR ROCK SPOIL AND BORROW AREAS, REGARDLESS OF THEIR LOCATIONS.

7. THE CONTRACTOR IS ADVISED TO BECOME THOROUGHLY FAMILIAR WITH THE PROVISIONS SO THE APPENDIX 64, EROSION CONTROL RULES AND REGULATIONS, TITLE 25, PART 1 DEPARTMENT OF ENVIRONMENTAL PROTECTION, SUBPART C. PROTECTION OF NATURAL RESOURCES, ARTICLE III, WATER RESOURCES, CHAPTER 102, EROSION CONTROL.

8. A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN MUST BE AVAILABLE AT THE PROJECT SITE AT

102.4(B)(5)(I) "THE EXISTING TOPOGRAPHIC FEATURES OF THE PROJECT SITE AND THE IMMEDIATE SURROUNDING AREA."

9. THE E&S CONTROL PLAN MAPPING MUST DISPLAY A PA ONE

CALL SYSTEM INCORPORATED SYMBOL INCLUDING THE SITE IDENTIFICATION NUMBER. (THIS IS A NUMBERED SYMBOL NOT A 102.4(B)(5)(VII) "A SEQUENCE OF BMP INSTALLATION AND

DISTURBANCE ACTIVITIES, PRIOR TO, DURING, AND AFTER EARTH DISTURBANCE ACTIVITIES." 102.4(B)(4) "EARTH DISTURBANCE ACTIVITIES SHALL BE PLANNED AND CONDUCTED TO MINIMIZE THE EXTENT AND

REMOVAL IN RELATION TO THE SCHEDULING OF EARTH

102.22(A) "UPON COMPLETION OF AN EARTH DISTURBANCE ACTIVITY OR ANY STAGE OR PHASE OF AN ACTIVITY, THE SITE SHALL BE IMMEDIATELY SEEDED, MULCHED OR OTHERWISE

DURATION OF EARTH DISTURBANCE."

PROTECTED FROM ACCELERATED EROSION AND SEDIMENTATION. 10. EROSION AND SEDIMENT BMP MUST BE CONSTRUCTED, STABILIZED, AND FUNCTIONAL BEFORE SITE DISTURBANCE BEGINS WITHIN THE TRIBUTARY AREAS OF THOSE BMPS. E&SPCPM P168

11. AFTER FINAL SITE STABILIZATION HAS BEEN ACHIEVED, TEMPORARY EROSION AND SEDIMENT BMPS CONTROLS MUST BE REMOVED. AREAS DISTURBED DURING REMOVAL OF BMPS MUST BE STABILIZED IMMEDIATELY. E&SPCPM P168

12. AT LEAST 7 DAYS BEFORE STARTING ANY EARTH DISTURBANCE ACTIVITIES, THE OPERATOR SHALL INVITE ALL CONTRACTORS INVOLVED IN THOSE ACTIVITIES, THE LANDOWNER, ALL APPROPRIATE MUNICIPAL OFFICIALS, THE EROSION AND SEDIMENT CONTROL PLAN PREPARER, AND THE LACKAWANNA CONSERVATION DISTRICT TO AN ON-SITE MEETING. ALSO, AT LEAST 3 DAYS BEFORE STARTING ANY EARTH DISTURBANCE ACTIVITIES, ALL CONTRACTORS INVOLVED IN THOSE ACTIVITIES SHALL NOTIFY THE PENNSYLVANIA ONE CALL SYSTEM INCORPORATED AT 1-800-242-1776 FOR BURIED UTILITIES LOCATIONS.

13. ALL EARTH DISTURBANCE ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE FOLLOWING SEQUENCE. EACH STAGE SHALL BE COMPLETED BEFORE ANY FOLLOWING STAGE IS INITIATED. CLEARING AND GRUBBING SHALL BE LIMITED ONLY TO THOSE AREAS DESCRIBED IN EACH STAGE.

14. IMMEDIATELY AFTER EACH DISTURBANCE ACTIVITIES CEASE, THE OPERATOR SHALL STABILIZE ANY AREAS DISTURBED BY THE ACTIVITIES. DURING NON-GERMINATING PERIODS, MULCH MUST BE APPLIED AT THE SPECIFIED RATES. DISTURBED AREAS WHICH ARE NOT AT FINISHED GRADE AND WHICH WILL BE REDISTURBED WITHIN 1 YEAR MUST BE STABILIZED IN ACCORDANCE WITH THE TEMPORARY VEGETATIVE STABILIZATION SPECIFICATIONS. DISTURBED AREAS WHICH ARE AT FINISHED GRADE OR WHICH WILL NOT BE REDISTURBED WITHIN 1 YEAR MUST BE STABILIZED IN ACCORDANCE WITH THE PERMANENT

15. AN AREA SHALL BE CONSIDERED TO HAVE ACHIEVED FINAL STABILIZATION WHEN IT HAS A MINIMUM UNIFORM 70% PERENNIAL VEGETATIVE COVER OR OTHER PERMANENT NON-VEGETATIVE COVER WITH A DENSITY SUFFICIENT TO RESIST ACCELERATED SURFACE EROSION AND SUBSURFACE CHARACTERISTICS SUFFICIENT TO RESIST SLIDING AND OTHER

4115ES01

VEGETATIVE STABILIZATION SPECIFICATIONS.

# TEMPORARY STABILIZATION & PERMANENT STABILIZATION

16. HAY OR STRAW MULCH MUST BE APPLIED AT 3.0 TONS PER ACRE.

17. MULCH WITH MULCH CONTROL NETTING OR EROSION CONTROL BLANKETS MUST BE INSTALLED ON ALL SLOPES 3:1 AND STEEPER.

18. STRAW MULCH SHALL BE APPLIED IN LONG STRANDS, NOT CHOPPED OR FINELY BROKEN.

102.4(B)(5)(X) "A MAINTENANCE PROGRAM WHICH PROVIDES FOR INSPECTION OF BMPS ON A WEEKLY BASIS AND AFTER EACH MEASURABLE RAINFALL EVENT, INCLUDING THE REPAIR OF THE BMPS TO ENSURE EFFECTIVE AND EFFICIENT OPERATION."

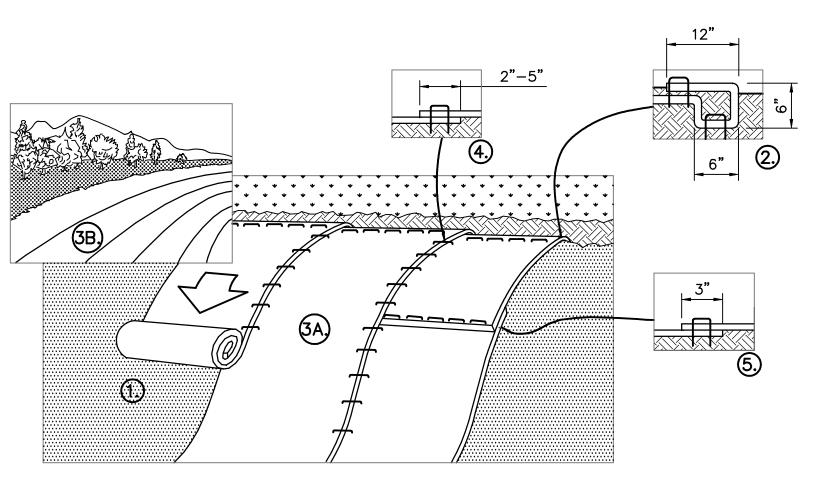
19. UNTIL THE SITE IS STABILIZED, ALL EROSION AND SEDIMENT BMPS MUST BE MAINTAINED PROPERLY. MAINTENANCE MUST INCLUDE INSPECTIONS OF ALL EROSION AND SEDIMENT CONTROL BMPS AFTER EACH RUNOFF EVENT AND ON A WEEKLY BASIS. ALL PREVENTATIVE AND REMEDIAL MAINTENANCE WORK, INCLUDING CLEAN OUT, REPAIR, REPLACEMENT, REGRADING, RESEEDING, REMULCHING, AND RENETTING, MUST BE PERFORMED IMMEDIATELY. IF EROSION AND SEDIMENT CONTROL BMPS FAIL TO PERFORM AS EXPECTED, REPLACEMENT BMPS, OR MODIFICATIONS OF THOSE INSTALLED WILL BE REQUIRED. E&SPCPM P168

20. SEDIMENT REMOVED FROM BMPS SHALL BE DISPOSED OF IN LANDSCAPED AREAS OUTSIDE OF STEEP SLOPES, WETLANDS, FLOODPLAINS OR DRAINAGE SWALES AND IMMEDIATELY STABILIZED OR PLACED IN TOPSOIL STOCKPILES.

102.4(B)(5)(XII) "PROCEDURES WHICH ENSURE THAT THE PROPER MEASURES FOR THE RECYCLING OR DISPOSAL OF MATERIALS ASSOCIATED WITH OR FROM THE PROJECT SITE WILL

21. THE OPERATOR SHALL REMOVE FROM THE SITE, RECYCLE, OR DISPOSE OF ALL BUILDING MATERIALS AND WASTES IN ACCORDANCE WITH THE DEPARTMENT'S SOLID WASTE MANAGEMENT REGULATIONS AT 25 PA. CODE 260.1 ET SEQ., 271.1, AND 287.1 ET SEQ. THE CONTRACTOR SHALL NOT ILLEGALLY BURY, DUMP, OR DISCHARGE ANY BUILDING MATERIAL OR WASTES AT THE SITE.

BE UNDERTAKEN IN ACCORDANCE WITH THIS TITLE."



1. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED. NOTE: WHEN USING CELL-O-SEED PREPARE AREA. CELL-O-SEED MUST BE INSTALLED WITH PAPER SIDE DOWN.

2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE BLANKET IN A 6" DEEP x 6" WIDE TRENCH WITH APPROXIMATELY 12" OF BLANKET EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE BLANKET WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN THE BOTTOM OF TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING, APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" PORTION OF BLANKET BACK OVER SEED AND COMPACTED SOIL. SECURE BLANKET OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" APART ACROSS THE WIDTH OF THE BLANKET.

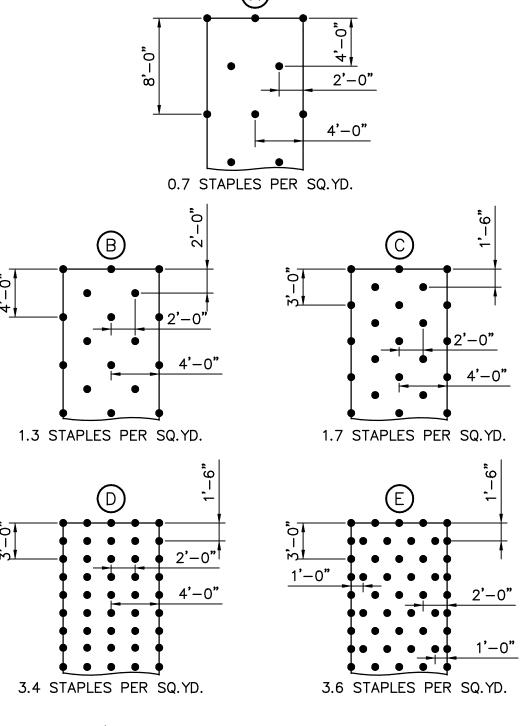
3. ROLL THE BLANKETS (A.) DOWN OR (B.) HORIZONTALLY ACROSS THE SLOPE. BLANKETS WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL BLANKETS MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE. WHEN USING THE DOT SYSTEM M, STAPLES/STAKES SHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE

4. THE EDGES OF PARALLEL BLANKETS MUST BE STAPLED WITH APPROXIMATELY 2" - 5" OVERLAP DEPENDING ON BLANKET TYPE.

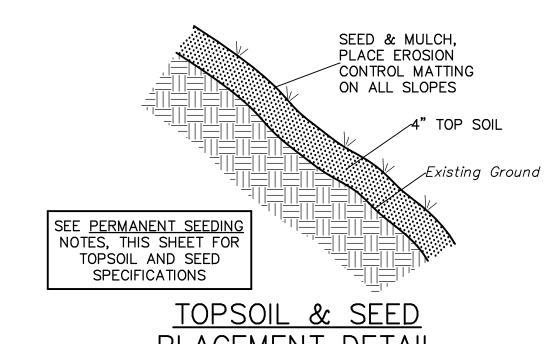
5. CONSECUTIVE BLANKETS SPLICED DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE) WITH AN APPROXIMATE 3" OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" APART ACROSS ENTIRE BLANKET WIDTH.

\*IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" MAY BE NECESSARY TO PROPERLY SECURE THE BLANKETS.

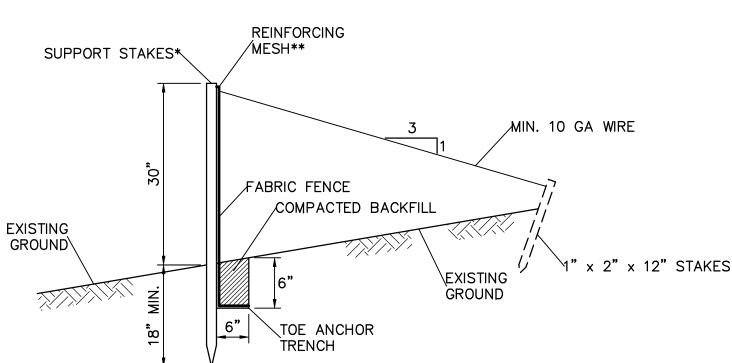
> INSTALLATION OF EROSION CONTROL MATTING FOR SLOPE PROTECTION NOT TO SCALE



8' WIDE ROLLS <u>STAPLE PATTERN GUIDE</u> NOT TO SCALE



MESH\*\* JOINING FENCE SECTIONS **CUTAWAY VIEW** 



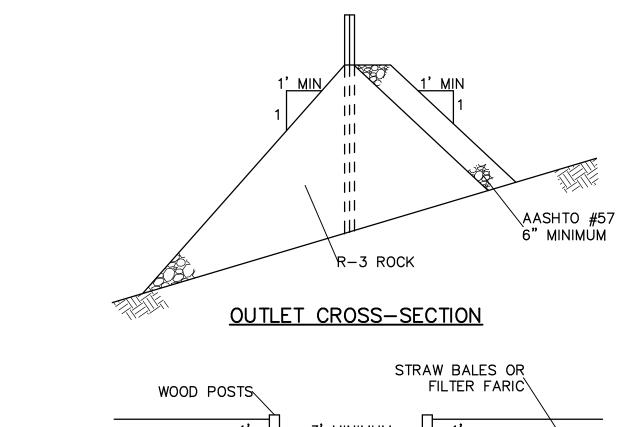
\* STAKES SPACED @ 8' MAX. USE 2" x 2" WOOD OR EQUIVALENT STEEL STAKES. \*\*EITHER INDUSTRIAL POLYPROPOLENE OR STEEL MESH WITH 6" MAX. OPENING STEEL MESH SHALL BE 14 GA. MIN.

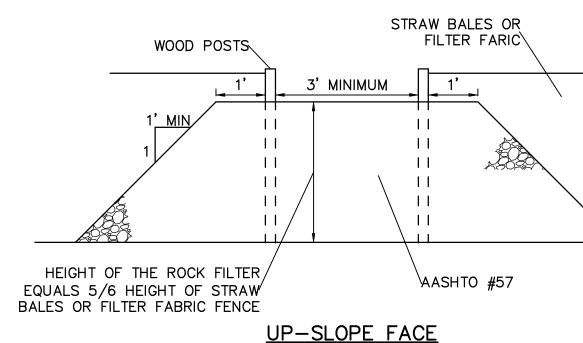
FILTER FABRIC FENCE MUST BE INSTALLED AT EXISTING LEVEL GRADE. BOTH ENDS OF EACH FENCE SECTION MUST BE EXTENDED AT LEAST 8 FEET UPSLOPE AT 45 DEGREES TO THE MAIN FENCE ALIGNMENT.

SEDIMENT MUST BE REMOVED WHERE ACCUMULATIONS REACH 1/2 THE ABOVE GROUND HEIGHT OF THE FENCE. ANY FENCE SECTION WHICH HAS BEEN UNDERMINED OR TOPPED MUST BE

IMMEDIATELY REPLACED WITH A ROCK FILTER OUTLET. NOTE: SHOW ALL DETAILS AND CONSTRUCTION DIMENSIONS ON PLAN DRAWINGS.

STANDARD CONSTRUCTION DETAIL #20 (30" HIGH) REINFORCED FILTER FABRIC FENCE





SEDIMENT MUST BE REMOVED WHEN ACCUMULATIONS REACH 1/3 THE HEIGHT OF THE OUTLET, OR REPLACED WITH NEW ROCK. ROCK FILTER OUTLET

\* INSTALL ROCK FILTER OUTLETS AS DIRECTED WHERE SILT FENCING CANNOT

HANDLE THE CONDITIONS OF THE SITE, AS DIRECTED IN NOTE OF THE SILT

SPECIFIED DIMENSIONS BY ADDING ROCK. A STOCKPILE SHALL BE MAINTAINED ON SITE FOR THIS PURPOSE. AT THE END OF EACH CONSTRUCTION DAY, ALL SEDIMENT DEPOSITED ON PAVED ROADWAYS SHALL BE REMOVED AND RETURNED TO THE CONSTRUCTION SITE. **ROCK CONSTRUCTION** ENTRANCE DETAILS NOT TO SCALE

**MAINTENANCE:** 

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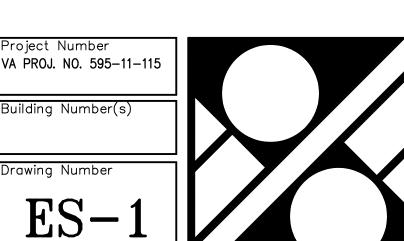


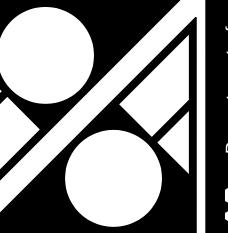
KBA Engineering, p.c.

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LEBANON VA Medical Center **EROSION & SEDIMENT** CORRECT WATER TOWER CONTROL DETAILS **DEFICIENCIES** Lebanon, PA LB, JZ 04/13/12

BARRIER FENCE DETAIL.





AASHTO #1 ROCK

SECTION A-A

50' MIN.

ROCK CONSTRUCTION ENTRANCE THICKNESS

SHALL BE CONSTANTLY MAINTAINED TO THE

GEOTEXTILE/



Building Construction & Site Design Services Service Disabled Veteran Owned Small Business